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### **REMARKS/ARGUMENTS**

Favorable reconsideration of this application is requested in view of the amendments above and the remarks which follow.

#### **Disposition of Claims**

Claims 1 and 3-14 remain in this application. Claim 2 has been cancelled. Claims 7-14 have been withdrawn.

#### **Election/Restrictions**

Applicant affirms election of claims 1-6 for prosecution on the merits. In view of this restriction requirement, applicant retains the right to present claims 7-14 in a divisional application.

#### **Specification**

The Examiner objects to the disclosure because of inconsistencies in the definition of  $\theta$  in paragraphs [0007], [0009], [0022]. The term "a sin" in paragraph [0022] should read as "asin," which is a shorthand form for " $\sin^{-1}$ ". However, for consistency in notations, "asin" in paragraph [0022] has been amended to read as " $\sin^{-1}$ ". In addition, the definition of  $\theta$  has been corrected to be in agreement with the definition of the numerical aperture of a fiber. Applicant thanks the Examiner for pointing out the error.

#### **Rejections under 35 U.S.C. §112**

Claims 1-6 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Particularly, the Examiner states that the definition of  $\theta$  is not in agreement with the definition of the numerical aperture of a fiber.

Claim 2 has been cancelled. Accordingly, rejection of claim 2 is moot. Claims 1 and 3-6 have been amended as set forth above to correct the definition of  $\theta$  to be in agreement with the

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definition of the numerical aperture of a fiber. Applicant thanks the Examiner for the opportunity to correct this typographical error. Withdrawal of the rejection of claims 1 and 3-6 under 35 U.S.C. §112, second paragraph, is respectfully requested.

### **Rejections under 35 U.S.C. §102**

Claims 1-5 are rejected under 35 U.S.C. §102(b) as being anticipated by Kaneko et al. (U.S. Patent No. 4,815,807). Claim 2 has been cancelled. Accordingly, rejection of claim 2 is moot. Reconsideration of the rejection of claims 1 and 3-5 is respectfully requested.

Kaneko et al. do not disclose the limitation "a lens formed at a distal end of the optical fiber, the lens having a convex surface and a minimum diameter determined by  $2 \cdot T \cdot \tan(\theta)$ , where  $\theta = \sin^{-1}(NA/n)$ , T is thickness of the lens, n is index of refraction of the lens, and NA is numerical aperture of the optical fiber, wherein a radius of curvature of the convex surface is not smaller than a mode field radius of a mode in the lensed fiber," as recited in amended claim 1. The lens disclosed in Kaneko et al. has a circular end face formed with a Fresnel lens pattern (see col. 3, lines 29-30 of the Kaneko et al. patent). Kaneko et al. do not disclose a lens having a convex surface and a radius of curvature as defined in amended claim 1.

From the foregoing, Kaneko et al. do not anticipate claim 1 as amended. Withdrawal of the rejection of claim 1 is respectfully requested. Claims 3-5, being dependent from claim 1, are likewise patentable in view of the foregoing arguments.

### **Rejections under 35 U.S.C. §103**

Claim 6 is rejected under 35 U.S.C. §103(a) as being obvious over Kaneko et al. Reconsideration of this rejection is respectfully requested.

As discussed above, Kaneko et al. do not disclose "a lens formed at a distal end of the optical fiber, the lens having a convex surface and a minimum diameter determined by  $2 \cdot T \cdot \tan(\theta)$ , where  $\theta = \sin^{-1}(NA/n)$ , T is thickness of the lens, n is index of refraction of the lens, and NA is numerical aperture of the optical fiber, wherein a radius of curvature of the convex surface is not smaller than a mode field radius of a mode in the lensed fiber," as recited in amended claim 1. Since claim 6 depends from claim 1, claim 6 inherits this limitation which

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is not disclosed by Kaneko et al. This limitation is also not obvious in view of Kaneko et al. Therefore, claim 6 is not obvious in view of Kaneko et al. Withdrawal of the rejection of claim 6 is respectfully requested.

### Conclusion

Applicant believes that this paper is fully responsive to the Office Action dated August 19, 2005, and respectfully requests that a timely Notice of Allowance be issued in this case.

Please apply any charges not covered or credits in connection with this filing to Deposit Account No. 03-3325 (ref. SP03-007).

Respectfully submitted,

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Adenike Adebisi

Adenike A. Adebisi  
Reg. No. 42,254  
Tel.: (281) 856-8646